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THE NERVOUS SYSTEM OF THE FRESH-WATER SPONGE.

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While in the Adirondacks I collected a few branches of *Spongilla lacustris* and placed them in alcohol for study during the coming winter. This sponge is extremely common in many lakes and streams in the mountains, and in places completely covers the submerged trees and rocks and sends out its thousands of long, slender branches to the length of a foot or more.

Upon my return I sectioned portions of a branch for histological study, and to my surprise discovered what I take to be a nervous system. It consists of cells which have a more or less thick spindle or star-shape, terminating in one or more—rarely four—long thread-like processes, usually at each end, which unite with the other cells directly or extend for a considerable distance before so doing. The protoplasm is granular and the nucleus large and prominent. These cells group themselves together to form a thread which extends the entire length of the sponge and branches to enter the filaments as they branch, rarely doing so in the same stem. The cells apply themselves together so as to overlap one another and form with their processes a solid thread which contains no other kind of cells. In some respects these cells resemble the neuro-muscular cells of the hydra, but it is not probable that they serve the two functions here, since if they did have the power of contracting they would be prevented from so doing on account of the fact that the filaments are provided with so large a number of spicules that they cannot be contracted. From the structure, nature, position, and arrangement or grouping of the cells there seems to be little doubt that their function is that of a nervous system.

Two weeks after making this discovery I saw a notice to the effect that an Englishman had discovered a nervous system in a fresh-water sponge, but the place of publication was not given. I have been looking ever since for the article, but have as yet been unable to find it.

I do not feel at liberty to publish a detailed account of the nervous system in this sponge until I have seen all the literature on the subject. Hence this short notice of the nervous system in *Spongilla lacustris* is given simply with the hope that it will call attention to the subject and to any literature bearing upon it. I shall be more than thankful for any information in regard to the literature on the nervous system of sponges, and if in this way I find the article sought, or a reference to it, the object of this short paper will be fulfilled.